WHAT IS CLAIMED IS:

1. A method for deuteration of a compound having an aromatic ring and/or a heterocyclic ring, comprising reacting the compound having an aromatic ring and/or a heterocyclic ring with a heavy hydrogen source in the presence of an activated mixed catalyst of not less than two kinds of catalysts selected from among a palladium catalyst, a platinum catalyst, a rhodium catalyst, an iridium catalyst, a ruthenium catalyst, a nickel catalyst and a cobalt catalyst.

2. The method for deuteration according to claim 1, wherein the heavy hydrogen source is a deuterated solvent.

3. The method for deuteration according to claim 2, wherein the deuterated solvent is heavy water (D_2O).

4. The method for deuteration according to claim 1, wherein the activated mixed catalyst is a catalyst obtained by activating a mixed catalyst of not less than two kinds of catalysts selected from among a non-activated palladium catalyst, platinum catalyst, rhodium catalyst, iridium catalyst, ruthenium catalyst, nickel catalyst and cobalt catalyst by contact with hydrogen gas or heavy hydrogen gas.

5. The method for deuteration according to claim 4, wherein the contact of the non-activated mixed catalyst with hydrogen gas or heavy hydrogen gas is carried out in a reaction system of the deuteration.

6. The method for deuteration according to claim 1, wherein the activated mixed catalyst is an activated mixed catalyst of a palladium catalyst and a platinum catalyst.

7. The method for deuteration according to claim 6, wherein the palladium catalyst is palladium carbon.

8. The method for deuteration according to claim 6, wherein the platinum catalyst is platinum carbon.

9. The method for deuteration according to claim 6, wherein the activated mixed catalyst of a palladium catalyst and a platinum catalyst has a weight ratio of each metal in the palladium catalyst and the platinum catalyst of 1:99 to 99: 1.

10. The method for deuteration according to claim 1, wherein the compound having an aromatic ring and/or a heterocyclic ring has an alkylene chain bonded to the aromatic ring or the heterocyclic ring.

11. The method for deuteration according to claim 1, wherein the compound having an aromatic ring and/or a heterocyclic ring has an alkylamino group bonded to the aromatic ring or the heterocyclic ring.

12. The method for deuteration according to claim 1, wherein the compound having an aromatic ring and/or a heterocyclic ring has a carboxyl group bonded to the aromatic ring or the heterocyclic ring.